NTSB ID: SEA04LA074 Aircraft Registration Number: N3275Q

Occurrence Date: 04/27/2004 Most Critical Injury: Fatal

Occurrence Type: Accident Investigated By: NTSB

Location/Time

Airport Proximity: Off Airport/Airstrip	Distance From	m Landing Facility:		Direction Fro	m Airport:
Montour	ID	83617	1500	MDT	
Nearest City/Place	State	Zip Code	Local Time	Time Zone	

Aircraft Information Summary

Aircraft Manufacturer	Model/Series	Type of Aircraft
Schramm	Helicycle	Helicopter

Sightseeing Flight: No Air Medical Transport Flight: No

Narrative

Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:

HISTORY OF FLIGHT

On April 27, 2004, approximately 1500 mountain daylight time, a Schramm Helicycle experimental/homebuilt helicopter, N3275Q, was destroyed after impacting terrain while maneuvering near Montour, Idaho. The aircraft was registered to and operated by a private individual. The private pilot, sole occupant of the aircraft, sustained fatal injuries. Visual meteorological conditions prevailed for the 14 CFR Part 91 personal flight, and a flight plan was not filed. The flight departed Montour at 1406.

In a telephone interview with the NTSB investigator-in-charge (IIC), personnel who worked with the pilot reported that during the morning of the accident the pilot was doing a photo shoot prior to landing at Montour for fuel. An employee reported that 5 gallons of JP4 fuel was added to the center tank, which is elevated between the left and right tanks and fills the lower outboard tanks by gravity. The employee further reported that the fuel was supplied with the company's own equipment. The employee stated that after the fueling was completed the aircraft's departure was witnessed by ground personnel who were also in communication with the pilot. The helicopter was observed until it went out of sight around a hill, which was the last time it was heard from. No witnesses reported seeing the accident and the pilot was not in radio contact with any air traffic control facilities, or automated flight service stations.

At approximately 1900 on April 27th, an alert notification (ALNOT) was issued for the aircraft. According to law enforcement personnel, at 0819 on the morning of April 28th, the aircraft was located by search and rescue personnel partially submerged in the Payette River about 1 mile northwest of Montour.

PERSONNEL INFORMATION

The pilot held a private pilot certificate for helicopters. On his last Federal Aviation Administration (FAA) application for a third-class medical certificate, which was dated September 30, 2003, he reported a total flight experience of 1,500 hours, with 10 hours in the last 6 months.

METEOROLOGICAL INFORMATION

A weather observation was taken about 7 minutes before the accident at the Boise Air Terminal/Gowen Field (BOI), Boise, Idaho, which was located approximately 25 miles south-southeast of the accident site. According to the observation, the wind was 340 degrees at 6 knots, visibility 10 statue miles, sky clear, temperature 80 degrees Fahrenheit, dew point 34 degrees Fahrenheit, and an altimeter setting of 29.91 inches of Mercury.

NTSB ID: SEA04LA074

Occurrence Date: 04/27/2004

Occurrence Type: Accident

Narrative (Continued)

WRECKAGE AND IMPACT INFORMATION

Examination of the accident site by a Federal Aviation Administration (FAA) airworthiness inspector, revealed extensive damage due to impact forces with the water. The pilot's seat belts, shoulder harness and their attachments were intact. The wreckage was in several pieces with the turbine engine and accessories separate from the helicopter's airframe structure. Both rotor blades were still attached to the mast. One rotor blade was bent up just outboard of the mast attach point and was missing the outboard 5 feet of the blade. The other blade remained in one piece and slightly bent down. The inspector reported observing numerous rubber hoses with only one automotive hose clamp securing the ends. The tail rotor, tail rotor drive shaft, and a major portion of the empennage of the helicopter were never recovered. Also, the lower two fuel tanks were not recovered. The inspector reported that during his inspection the main rotor mast was free to turn and remained connected to the gearbox. Control continuity could not be determined due to the extensive damage to the rod ends and tubular components of the flight control system. The inspector observed a small metal arm that was welded to the tail rotor pedal control torque tube, approximately 1 inch inboard and below the pilot's left pedal, was broken off. The pedal system was removed and forwarded to the IIC for further evaluation. The inspector related that ground personnel who assisted and observed the pilot takeoff confirmed that the pilot was wearing a helmet equipped with a digital movie camera. The helmet and camera have not been recovered.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot by the GEM County Coroner's Office, Emmett, Idaho, on April 29, 2004. The cause of death was listed as "Blunt force trauma secondary to a helicopter accident".

A toxicology examination, performed by the FAA's Toxicological and Accident Research Laboratory, Oklahoma City, Oklahoma, on May 27, 2004, was negative for carbon monoxide, cyanide, and ethanol, but listed Propanolol detected in Blood and Doxylamine present in Urine. Propanolol is a prescription blood pressure medication. Doxylamine is an over-the-counter antihistamine.

TEST AND RESEARCH

The rudder pedal assembly was sent to the NTSB Materials Laboratory Division, Washington, DC., for examination. The Senior Metallurgist reported the rudder pedal assembly was fractured at the intersection of the left pedal output arm and the cross tube. The cross tube fracture was wholly contained in the cross tube material immediately adjacent to the output arm weld bead. Magnified visual examinations of the fracture surfaces and surrounding materials found features and deformation patterns consistent with a bending overstress separation. No preexisting cracking or weld defects were present. The cross tube was bent both vertically and horizontally and deformation was present at the right output arm similar to the left, but it was not fractured.

ADDITIONAL DATA

The aircraft was released to the owner's representative on May 28, 2004.

TRANSP
National Transportation Safety Board
0 7
FACTUAL REPORT
7 % 2 2
AVIATION

NTSB ID: SEA04LA074

Occurrence Date: 04/27/2004

AVIATION	Occurrence Type: Accident	
Narrative (Continued)		
I	FACTUAL REPORT - AVIATION	Page 1b

NTSB ID: SEA04LA074

Occurrence Date: 04/27/2004

AVIATION	Occurrence Type: Accident												
Landing Facility/Approach Inf	ormation						•						
Airport Name		/	Airport ID:	Airp	port Elevation	Run	way Used	Runwa	Runway Length		Runw	vay Width	
					Ft. MS	L NA	Λ.						
Runway Surface Type:													
Runway Surface Condition:													
NONE													
Type Instrument Approach: NONE													
VFR Approach/Landing: None	VFR Approach/Landing: None												
Aircraft Information Aircraft Manufacturer			T _{Mod}	el/Serie					Serial	Numbe	r		
Schramm				icycle	:5				HC00				
Airworthiness Certificate(s): Exper	rimental (Special)								<u> </u>				
Landing Gear Type: Skid													
L	Number of Seats:	1		Certified Max Gross Wt.				850 LBS Numbe					
Engine Type: Turbo Shaft			Engine M Solar	Engine Manufacturer: Model/Series: T62						Rated Power: 160 HP			
- Aircraft Inspection Information													
Type of Last Inspection			Date of Last Inspection Time S			Time Si	Since Last Inspection				Airframe Total Time		
								175 Hours					
- Emergency Locator Transmitter (E	ELT) Information												
ELT Installed? No	ELT Operate	ed?			EL	T Aided i	in Locating Ac	cident S	ite?				
Owner/Operator Information													
Registered Aircraft Owner			Street	Addres	ss								
Buford J. Schramm			City	City State								Zip Code	
			Caldwell									83605	
Operator of Aircraft			Street	Addres	ss Same as Re	a'd Aircr	aft Owner						
Same as Reg'd Aircraft Owner			City		<u> </u>	9 ~	<u> </u>			State	е	Zip Code	
			Operator Designator Code:										
Operator Does Business As: - Type of U.S. Certificate(s) Held: N	Jone						perator Design	lator oc	Jue.				
Air Carrier Operating Certificate(s):													
, Samo Spiriting 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1													
Operating Certificate:	Operating Certificate: Operator Certificate:												
Regulation Flight Conducted Under	: Part 91: Genera	ıl Aviati	on										
Type of Flight Operation Conducted	: Personal												
		FACTU	JAL REP	ORT -	AVIATION							Page 2	

NTSB ID: SEA04LA074

Occurrence Date: 04/27/2004

AVIATI		Occurrence Type: Accident											
First Pilot Information													
Name					City					Stat	e I	Date of Birth	Age
On File					On File	е				On I	File	On File	65
Sex: M Seat Occupied	ess				Cer	tificate	e Numb	er: On File					
Certificate(s): Private													
Airplane Rating(s): None													
Rotorcraft/Glider/LTA: Helicopter													
Instrument Rating(s): Non	ie												
Instructor Rating(s): None													
Type Rating/Endorsement f	or Accident/Ir	cident Aircra	ft?			С	urrent E	Biennia	Flight R	eview	ı?		
Medical Cert.: Class 3	Medica	al Cert. Status	s: Valid Me	dicalw/ wa	aivers/li	m.		D	ate of La	st Me	dical Ex	xam: 09/2003	
- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Mult-Engine	Night		Actual	Instrumen	t Simulated	F	Rotorcraft	Glider	Lighter Than Air
Total Time	1500												
Pilot In Command(PIC)					-			_		_			
Instructor					1			_		_			
Last 90 Days										+			
Last 30 Days Last 24 Hours								-		+			
Seatbelt Used? Yes	Shou	lder Harness	Head? Vac		1	Tovico	ology Pe	rforme	d? Yes		Se	econd Pilot? N o	
Gealbeit Osed: 163	31100	iluei Hairiess	Oseu: 1es			TOXICO	ology i c	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	u: 165		100	CONTAIN HOLE 140	,
Flight Plan/Itinerary													
Type of Flight Plan Filed: N	one												
Departure Point						State		Airport	Airport Identifier Departure Time T			Time Zone	
Montour						ID		,po			1406		MDT
Destination						State		Airport	Identifie	r			
Local Flight								Aliport definition					
Type of Clearance: None													
Type of Airspace: Class G													
Weather Information													
Source of Briefing: No rec	cord of briefi	ng											
Method of Briefing:													
	FACTUAL REPORT - AVIATION Page 3												

NTSB ID: SEA04LA074

Occurrence Date: 04/27/2004

Occurrence Type: Accident

	Occurren	Occurrence Type: Accident											
Weather	Information												
WOF ID	Observation Time	Time Zone	WOF Elevat	ion	WOF Distance From Accident Site					Direction From	n Accident Site)	
BOI	1553	MDT	2871 Ft	i. MSL				27 NM		165 Deg. Mag.			
Sky/Lowes	st Cloud Condition: Clear		Ft. AGL Conditi					Condition of Light: Day					
Lowest Ce	iling: None		Ft	Ft. AGL Visibility: 10				SM	Altir	meter:	29.86	"Hg	
Temperatu	ure: 27 °C I	Dew Point:	1 °C	Wind Direction: 340 Density Altitude: 4562								Ft.	
Wind Spee	ed: 6	Gusts:		Weather Condtions at Accident Site: Visual Conditions									
Visibility (R	RVR): Ft.	Visibility	/ (RVV)	SM	Intensi	ty of Precipi	itation:						
Restriction	s to Visibility: None	•											
Type of Pre	ecipitation: None												
Accident	Information												
Aircraft Dar	mage: Destroyed		Aircraft Fir	e: None	e Aircraft Explos					None None			
Classificati	on: U.S. Registered/U	.S. Soil											
- Injury Sur	mmary Matrix	Fatal	Serious Mino	or	None	TOTAL]						
First Pil	lot	1				<u>T</u>	1						
Second	d Pilot						7						
Studen	it Pilot						7						
Flight Iı	nstructor						7						
Check I	Pilot						7						
Flight E	Engineer						7						
Cabin /	Attendants						7						
Other Crew													
Passen	ngers				†	7							
- TOTAL A	ABOARD -				1	<u>-</u>							
Other G	Ground					Ť							
- GRANE	O TOTAL -	1				1	1						

National Transportation Safety Board

FACTUAL REPORT AVIATION

NTSB ID: SEA04LA074

Occurrence Date: 04/27/2004

Occurrence Type: Accident

Investigator-In-Charge (IIC)

Thomas M. Little

Additional Persons Participating in This Accident/Incident Investigation:

Terry Bateman Aivation Safety Inspector Federal Aviation Administration 3295 Elder Street Boise, ID 83705